

Environmental Action UPDATE

September 2018

AIR FORCE ENVIRONMENTAL ACTIVITIES AT WILLIAMS

The Air Force environmental remediation continues at the former Williams Air Force Base (AFB) in Mesa, Arizona with regulatory oversight from the United States Environmental Protection Agency (EPA), Arizona Department of Environmental Quality (ADEQ), and Arizona Department of Water Resources.

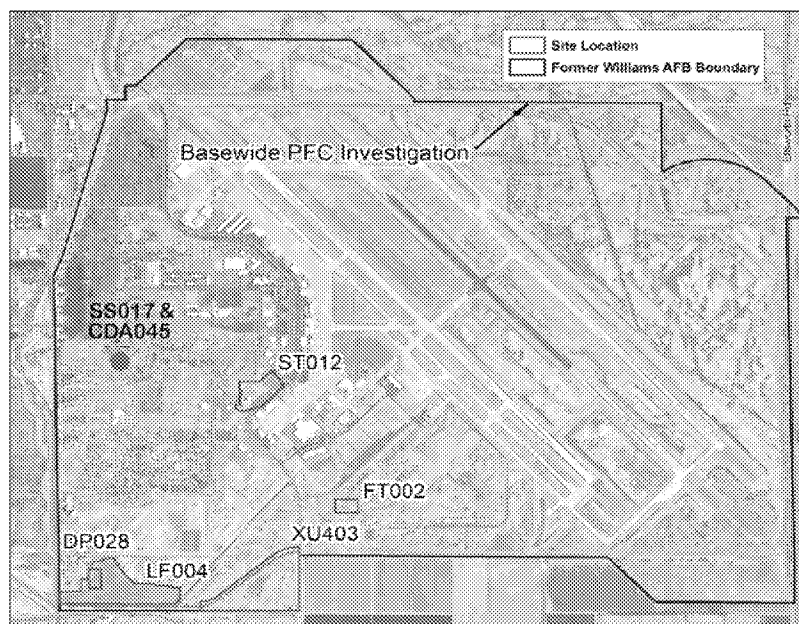
As a result of efforts spanning the past two decades, the Air Force Civil Engineer Center (AFCEC) has completed restoration at 75 of 83 environmental sites.

For seven of the closed sites, EPA and ADEQ approved closure with land use restrictions that the Air Force continues to monitor.

The remaining eight open sites are undergoing final cleanup actions necessary to ensure protection of human health and the environment, and five of these also have land-use restrictions.

To date, the Air Force has transferred most of the property from military to civilian ownership. A total of 96.5 percent of the former base's 4,043 acres has been transferred to new entities, including the Phoenix Mesa Gateway Airport and Arizona State University.

This has enabled the successful redevelopment of the



Eight open sites, including two sets of co-located sites and one base-wide site, remain at the former Williams Air Force Base.

former Williams AFB, bringing even more jobs and diverse labor opportunities to the region than when the base was open.

FINAL CLEANUP DOCUMENT SIGNED FOR WILLIAMS AFB

This spring, the Air Force reached a major cleanup milestone at Williams with the signing of the last remaining cleanup decision document.

By finalizing this document - the Operable Unit 6 Record of Decision (ROD) - all Williams Comprehensive Environmental Response, Compensation, and Liability Act sites now have a documented cleanup decision.

The Operable Unit 6 ROD, which selects the remedies for four sites, was achieved with regulatory input from EPA and ADEQ. The site identification and cleanup description for each of the four sites follows:

- Old Pesticide/Paint Shop (Site SS017). A removal action to excavate soil with dieldrin concentrations exceeding the Arizona residential soil remediation level (SRL) to a depth of 13 feet was completed at Site SS017 in March/April 2001. Groundwater monitoring has been performed at the site since 1998 and results have indicated no unacceptable risk to human health and the environment. Land use controls and continued groundwater monitoring were selected as the remedy for SS017.

The land use controls prohibit soil disturbances greater than 13 feet deep without prior regulatory and Air Force approval. The results from continued groundwater monitoring will be used to evaluate whether future groundwater dieldrin concentrations remain protective of human health and the environment.

- Base Production Well 6 (BPW6). Soil exceeding the Arizona residential SRLs and federal cleanup standards for polychlorinated biphenyls (PCBs) was addressed by an excavation removal action in 2001. The site no longer presents an unacceptable risk to human health or the environment and no further action was selected for the site.
- Decontamination Pad at Building 1069 and Investigative Waste Facility (IWF). Results of soil samples collected at both sites are below current Arizona residential SRLs. These areas do not pose an unacceptable risk to human health or the environment and no further action was selected for the sites.

A copy of the Final ROD can be found on the Administrative Record online at <http://afcecpublishadmin-record.us.af.mil> by selecting the "BRAC" button, then "Williams" for the installation, and entering "570543" in the Full Metadata Search field.

REMEDIATION EFFORTS COMPLETE AT FORMER GAS STATION

AFCEC environmental engineers have completed remediation at Site ST035, a former service station. The gasoline station operated for more than 20 years and included six underground storage tanks (USTs). The site was part of a larger property parcel transferred from the Air Force to Arizona State University. Petroleum-contaminated soil and groundwater were identified during removal of the underground storage tanks.

Remediation efforts included soil testing, soil vapor extraction, and groundwater monitoring.

The soil vapor extraction (SVE) system was in operation from 2010 to 2013 and removed approximately 115,000 pounds of total petroleum hydrocarbons. Groundwater monitoring was performed at Site ST035 from 1997 through 2016.

Since November 2014, all groundwater contaminants except the fuel additives methyl-tert-butyl ether (MTBE) and 1,2-dichloroethane (1,2-DCA) have decreased below regulatory standards in all sampling wells.

In accordance with ADEQ closure requirements for underground storage tank sites:

- Groundwater impacts have been characterized.
- The source area has been removed.
- Monitoring data indicates the remaining groundwater plume containing MTBE and 1,2-DCA is shrinking and not migrating.
- Natural attenuation of the remaining contaminants is occurring.
- There are no threatened or impacted drinking water wells nearby.
- There are no complete exposure pathways for soil, soil vapor or groundwater.

Based on achieving the closure requirements, the Air Force submitted a Site ST035 closure report.

Closure was approved by ADEQ in June 2018.



Site ST035 was part of a larger property parcel transferred from the Air Force to Arizona State University.



Groundwater monitoring was performed at Site ST035 from 1997 through 2016.

ST012 SVE SYSTEM CONTINUES TO DO ITS JOB REMOVING CONTAMINANTS

Site ST012 is a 12-acre former liquid fuels storage area used from 1941 to 1991 where historic releases of jet propellant fuel (JP-4) and/or aviation gasoline contaminated the soil and groundwater.

The site was transferred to the Phoenix Mesa Gateway Airport with restrictions on soil excavation and installation of groundwater wells.

Contaminants of concern at the site include benzene, naphthalene and other petroleum hydrocarbon chemicals.

Soil Vapor Extraction technology has been operating since April 2005 to remove these contaminants, resulting in removal of more than 370,000 gallons of petroleum contaminants as of June 2018.

Another technology that has been used at the site is Steam Enhanced Extraction (SEE), which operated from September 2014 to April 2016 and removed nearly 400,000 gallons of petroleum contaminants.

The next phase of cleaning up the remaining groundwater contaminants at ST012 will be Enhanced Bioremediation. The effectiveness of Enhanced Bioremediation will be evaluated during implementation.

SVE will continue to remove soil contaminants, groundwater monitoring will continue to evaluate remedial status and progress, and land use restrictions will remain in place to protect public health and the environment.



Enhanced Bioremediation is planned to continue cleaning up remaining groundwater contaminants at ST012.



The results of Enhanced Bioremediation will be evaluated for effectiveness.

For more information

Contact the Air Force Civil Engineer Center for more information about the environmental remediation program at the former Williams AFB. E-mail us at afropa.west.pa@us.af.mil, find us online at www.afcec.af.mil/Home/BRAC/Williams, or call us at 916-643-1250, ext. 257.